I hereby certify the this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "commissioner for Patents, Washington, DC 20231" on

Atty Dkt No. 2100-0016 **PATENT** 

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

n Re Application of:

Martin BONDE et al.

Serial No.: 10/080,901

Group Art Unit: 1743

Filing Date: February 21, 2002

Examiner: Unassigned

Title: DEVICE AND METHOD FOR CONDUCTING CELLULAR ASSAYS USING

MULTIPLE FLUID FLOW

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, DC 20231

Sir:

RECEIVED
TO 1700 This is an Information Disclosure Statement submitted for the Examiner's consideration. Applicants respectfully request that the Examiner review and make of record the references identified below.

PTO-1449 forms listing the references accompany this paper. Applicants would appreciate the Examiner's initialing and returning the forms to indicate that the references have been reviewed and made of record. The references are as follows:

	U.S. PATENT DOCUMENTS		
Patent No.	Issue Date	Patentee Beyer et al. Beyer et al. Beyer et al. Bonde et al. Socks et al.	
Serial No. 60/286,819	Filed 4/25/01		
Serial No. 60/286,494	Filed 4/25/01		
Serial No. 60/286,550	Filed 4/25/01		
Serial No. 09/896,484	Filed 6/29/01		
Serial No. 09/941,944	Filed 8/28/01		
3,449,938	6/17/69	Giddings	
4,912,057	3/27/90	Guirguis et al.	
5,202,227	4/13/93	Matsuda et al.	
5,514,555	5/7/96	Springer et al.	
5,536,662	7/16/96	Humphries et al.  Matsuda et al.  Faller et al.  Yager et al.  Brown et al.  Singhvi et al.  Weigl et al.  Weigl et al.	
5,593,814	1/14/97		
5,656,441	8/12/97		
5,716,852	2/10/98		
5,739,001	4/14/98		
5,776,748	7/7/98		
5,948,684	9/7/99		
5,972,710	10/26/99		

U.S. PATENT DOCUMENTS				
Patent No.	Issue Date	Patentee Singhvi et al.		
5,976,826 6,010,845	11/2/99 1/4/00			
		Poston		
6,040,152	3/21/00	Kupfer et al.		
6,060,317	5/9/00	Malech		
6,091,502	7/18/00	Weigl et al.		
6,103,479	8/15/00	Taylor		
6,120,666	9/12/00	Jacobson et al.		
6,159,739	12/12/00	Weigl et al.		
6,171,865	1/9/01	Wiegl et al.  Manger et al.  Whitesides et al.  Malmqvist et al.		
6,174,690	1/16/01			
6,180,239	1/30/01			
6,200,814	3/13/01			
6,251,615	6/26/01	Oberhardt		
6,281,202	8/28/01	Magnani et al.		

FOREIGN PATENT DOCUMENTS				
Document No.	Publication Date	Country		
WO 97/19105	5/29/97	PCT		
WO 98/10267	3/12/98	PCT		
WO 99/05512	2/4/99	PCT		
WO 99/36766	7/22/99	PCT		
WO 00/56444	9/28/00	PCT		

OTHER	DOCL	JN	<u> MEI</u>	$\overline{NTS}$

Internet web page listing for a parallel flow plate apparatus at <a href="https://www.glycotech.com/apparatus/parallel.html">www.glycotech.com/apparatus/parallel.html</a> and <a href="https://www.glycotech.com/protocols/proto7.html">www.glycotech.com/protocols/proto7.html</a>, 2001.

Boyden (1962), "The Chemotactic Effect of Mixtures of Antibody and Antigen on Polymorphonuclear Leucocytes," *J. Exp. Med.* 115:453-466.

Ramos et al., "Quantitative Measurement of Cell - Cell Adhesion Under Flow Conditions," *Methods in Molecular Medicine* 18:507-519.

Stamper et al. (1976), "Lymphocyte Homing into Lymph Nodes: In Vitro Demonstration of the Selective Affinity of Recirculating Lymphocytes for High-Endothelial Venules," *The Journal of Experimental Medicine* 144(3):828-833.

Takayama et al. (1999), "Patterning Cells and Their Environments Using Multiple Laminar Fluid Flows in Capillary Networks," *PNAS* <u>96</u>(10):5545-5548.

Takayama et al. (2001), "Laminar Flows: Subcellular Positioning of Small Molecules," Nature 411:1016.

Tashiro et al. (2000), "Design and Simulation of Particles and Biomolecules Handling Micro Flow Cells with Three-Dimensional Sheath Flow," *Micro Total Analysis Systems 2000*, pp. 209-212.

Thoma et al. (1999), "Synthesis and Biological Evaluation of a Potent E-Selectin Antagonist," *J. Med. Chem.* 42:4909-4913.

Weigl et al. (1999), "Microfluidic Diffusion-Based Separation and Detection," Science 283(5400):346-347.

The first five references identified above and as listed on the attached PTO-1449 forms as Reference Nos. AA-AE are U.S. patent applications, and, as such, copies are not included pursuant to 37 CFR § 1.98(a)(2)(iii).

This Information Disclosure Statement is not intended as a representation that a search has been made, that additional information material to the examination of this application does

Atty Dkt No. 2100-0016 Serial No. 10/080,901

not exist, or that any of the above references constitutes prior art to the present application within the meaning of 35 USC § 102.

As applicants have not yet received a first Action on the merits, no fee is required for filing this Information Disclosure Statement. If, however, the PTO finds that for some reason a fee is found to be necessary, our Deposit Account No. 18-0580 may be charged therefor. A duplicate copy of this paper is enclosed.

Respectfully submitted,

By:

Louis L. Wu

Registration No. 44,413

REED & ASSOCIATES 800 Menlo Avenue, Suite 210 Menlo Park, California 94025 (605) 330-0900 Telephone (650) 330-0980 Facsimile